MEZMERIZOR 4FX
3D RGB LASER

TABLE OF CONTENTS

1. GETTING STARTED

What's In The Box?

- 1 x Mezmerizor™
- 1 x Mounting bracket w/bolts
- This Lovely User Manual

Getting It Out Of The Box

Congratulations on purchasing one way cool, way original RGB 3D Laser! Now that you've got your Mezmerizor™ (or hopefully, *Mezmerizors!*), you should carefully unpack the box and check the contents to ensure that all parts are present and in good condition. If anything looks as if it has been damaged in transit, notify the shipper immediately and keep the packing material for inspection. Again, please save the carton and all packing materials. If a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

Powering Up!

All fixtures must be powered directly off a switched circuit and **cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch**.

AC Voltage Switch - Not all fixtures have a voltage select switch, so please verify that the fixture you receive is suitable for your local power supply. See the label on the fixture or refer to the fixture's specifications chart for more information. A fixture's listed current rating is its average current draw under normal conditions. Check the fixture or device carefully to make sure that if a voltage selection switch exists that it is set to the correct line voltage you will use.

Warning! *Verify that the voltage select switch on your unit matches the line voltage applied. Damage to your fixture may result if the line voltage applied does not match the voltage indicated on the voltage selector switch. All fixtures must be connected to circuits with a suitable Ground (Earthing).*

Getting A Hold Of Us
If something is wrong, just give us a call or send an email. We'll be happy to help, honest.

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LASER SAFETY REQUIREMENTS

Lasers are one of the coolest effects available, and when they are used appropriately, they will be fun, legal and harmless. To make sure that is the case...

• Always set up and install all laser effects so that all laser light is at least 3 meters (9.8 feet) above the floor on which people can stand.

• After setting up, and before public use, test laser to ensure proper function. Do not use if any defect is detected. Do not use if laser emits only one or two laser beams rather than dozens/hundreds, as this could indicate damage to the diffraction grating optic, and could allow emission of higher laser levels above Class 3R.

• **NEVER** point lasers at people or animals. Never look into the laser aperture or laser beams.

• **NEVER** point lasers in areas in which people can potentially get exposed, such as uncontrolled balconies, etc.

• **NEVER** point lasers at highly reflective surfaces, such as windows, mirrors and shiny metal. Even laser reflections can be hazardous.

• **NEVER** point a laser at aircraft, **this is a federal offense!**

• **NEVER** point un-terminated laser beams into the sky.

• **NEVER** expose the output optic (aperture) to cleaning chemicals.

• **NEVER** use laser if the laser appears to emit only one or two beams.

• **NEVER** use the laser if the housing is damaged, the housing is open, or if the optics appear damaged in any way.

• **NEVER** open the laser housing. The high laser power levels inside of the protective housing can start fires, burn skin and will cause instant eye injury.

• **NEVER** leave this device running unattended.

The operation of a class 3R laser show is only allowed if the show is controlled by a skilled and well-trained operator, familiar with the data from this manual. The legal requirements for using laser entertainment products vary from country to country. The user is responsible for the legal requirements at the location/country of use.

CAUTION
CLASS 3B LASER LIGHT
WHEN OPEN
AVOID EXPOSURE
TO BEAM
Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No.50, dated June 24, 2007.

LASER LIGHT
AVOID DIRECT
EYE EXPOSURE
CLASS 3R LASER PRODUCT
<5mw, 532nm & 650nm,
100 mSec -CW

CLASSIFIED PER
IEC 60825-1 Ed 2, 2007-03

Page 4

2. MEET THE MEZMERIZOR™

MAIN FEATURES

- High power class 3R RGB laser
- Sound active mode, auto mode, DMX512 (15ch) & master/slave
- 120 static patterns and 20+ animated graphic show patterns
- 3-pin DMX In/Out
- Microphone sensitivity adjustment knob
- Dipswitch controlled function settings
- Polished blue aluminum casing w/hanging bracket
- Compact and lightweight (it kept its new year's resolution!)

Laser Specifications

Color	Wavelength	Power Output
Red	650nm	100mW
Green	532nm	50mW
Blue	470nm	100mW
White (all)		250mW

DMX Quick Reference - 15 Channel Mode

Channel	What it does
1	Mode
2	Pattern Mode
3	Pattern 1 Selection
4	Pattern 1 Color
5	Pattern 2 Selection
6	Pattern 2 Color
7	Dual Pattern Mode
8	Moving-X
9	Moving-Y
10	Dimmer-X
11	Dimmer-Y
12	Rotation
13	Pattern Zoom
14	Sine Wave Fluctuation
15	Drawing

Figure 1: The Mezmerizor™ Pin-Up Picture

Secure Mounting Bracket
& Adjustment Screws

Attractive Blue
Colored Aluminum Casing

Laser Output (Aperture)

Figure 2: The Rear Connections

Mic Sensitivity

Cooling Fan

Dipswitches

On/Off Switch

Microphone

Mic Indicator

DMX In   DMX Out

AC Power Input

Power Indicator

Page 6

3. SETUP

> ⚠ Before replacing a fuse, disconnect power cord. ALWAYS replace with the same type and rating of fuse.

Fuse Replacement

With a philips head screwdriver, unscrew the fuse holder from its housing. Remove the damaged fuse from its holder and replace with exact same type fuse. Insert the fuse holder back in its place and reconnect power.

Connecting A Bunch of Mezmerizor™ Fixtures

You will need a serial data link to run light shows using a DMX-512 controller or to run shows on two or more fixtures set to sync in master/slave operating mode. The combined number of channels required by all the fixtures on a serial data link determines the number of fixtures the data link can support.

Fixtures on a serial data link must be daisy chained in one single line. Also, connecting more than 32 fixtures on one serial data link without the use of a DMX optically-isolated splitter may result in deterioration of the digital DMX signal.
The maximum recommended cable-run distance is 500 meters (1640 ft). The maximum recommended number of fixtures on a serial data link is 32 fixtures.

Data/DMX Cabling

To link fixtures together you'll need data cables. You should use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

For instance, Belden© 9841 meets the specifications for EIA RS-485 applications. Standard microphone cables will "probably" be OK, but note that they cannot transmit DMX data as reliably over long distances. In any event, the cable should have the following characteristics:

> *2-conductor twisted pair plus a shield*
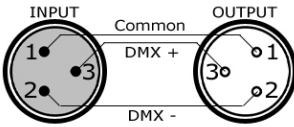> *Maximum capacitance between conductors – 30 pF/ft.*
> *Maximum capacitance between conductor & shield – 55 pF/ft.*
> *Maximum resistance of 20 ohms / 1000 ft.*
> *Nominal impedance 100 – 140 ohms*

Page 7

Cable Connectors

Cables must have a male XLR connector on one end and a female XLR connector on the other end. (Duh!)

A Word on Termination: DMX is a resilient communication protocol, however errors still occasionally occur. Termination reduces signal errors, and therefore best practices include use of a terminator in all circumstances. If you are experiencing problems with erratic fixture behavior, especially over long signal cable runs, a terminator may help improve performance.

To build your own DMX Terminator: Obtain a 120-ohm, 1/4-watt resistor, and wire it between pins 2 & 3 of the last fixture. They are also readily available from specialty retailers.

120-ohm, 1/4-watt resistor
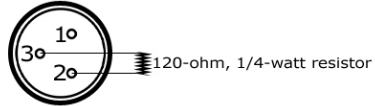
CAUTION: Do not allow contact between the common and the fixture's chassis ground. Grounding the common can cause a ground loop, and your fixture may perform erratically. Test cables with an ohm meter to verify correct polarity and to make sure the pins are not grounded or shorted to the shield or each other.

3-Pin??? 5-Pin??? Huh?!?

If you use a controller with a 5 pin DMX output connector, you will need to use a 5 pin to 3 pin adapter. They are widely available over the internet and from specialty retailers If you'd like to build your own, the chart below details a proper cable conversion:

Conductor	3-Pin Female (Output)	5-Pin Male (Input)
Ground/Shield	Pin 1	Pin 1
DMX Data (-)	Pin 2	Pin 2
DMX Data (+)	Pin 3	Pin 3
Not Used.	No Connection.	No Connection.
Not Used.	No Connection.	No Connection.

Take It To The Next Level: Setting Up DMX Control

Step 1: Connect the male connector of the DMX cable to the female connector (output) on the controller.

Step 2: Connect the female connector of the DMX cable to the first fixture's male connector (input). *Note:* It doesn't matter which fixture address is the first one connected. We recommend connecting the fixtures in terms of their proximity to the controller, rather than connecting the lowest fixture number first, and so on.
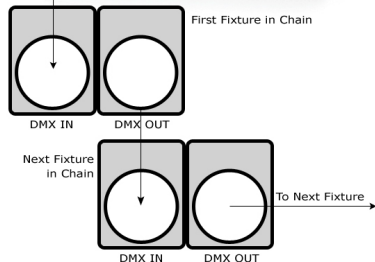
Step 3: Connect other fixtures in the chain from output to input as above. Place a DMX terminator on the output of the final fixture to ensure best communication.

First Fixture in Chain

DMX IN   DMX OUT

Next Fixture in Chain

To Next Fixture

DMX IN   DMX OUT

Page 8

Fixture Linking (Master/Slave Mode)

1. Connect the (male) 3 pin connector side of the DMX cable to the output (female) 3 pin connector of the first fixture.
2. Connect the end of the cable coming from the first fixture which will have a (female) 3 pin connector to the input connector of the next fixture consisting of a (male) 3 pin connector. Then, proceed to connect from the output as stated above to the input of the following fixture and so on.

First Fixture in Chain

DMX IN   DMX OUT

Next Fixture in Chain

To Next Fixture

DMX IN   DMX OUT
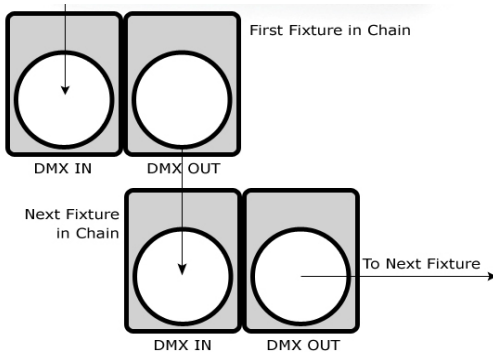
A quick note: Often, the setup for Master-Slave and Standalone operation requires that the first fixture in the chain be initialized for this purpose via either settings in the control panel or DIP-switches. Secondarily, the fixtures that follow may also require a slave setting.

Check the "**Operating Adjustments**" section in this manual for complete instructions for this type of setup and configuration.

Mounting & Rigging

This fixture may be mounted in any SAFE position provided there is enough room for ventilation.

It is important never to obstruct the fan or vents pathway. Mount the fixture using a suitable "C" or "O" type clamp. The clamp should be rated to hold at least 10x the fixture's weight to ensure structural stability. Do not mount to surfaces with unknown strength, and ensure properly "rated" rigging is used when mounting fixtures overhead.

Adjust the angle of the fixture by loosening both knobs and tilting the fixture. After finding the desired position, retighten both knobs.

• When selecting installation location, take into consideration lamp replacement access (if applicable) and routine maintenance.

• Safety cables MUST ALWAYS be used.

• Never mount in places where the fixture will be exposed to rain, high humidity, extreme temperature changes or restricted ventilation.

Page 9

4. OPERATING ADJUSTMENTS

DIP Switch Settings

All of the various functions of the Mezmerizor™ are set up using the 10-position DIP switch located on the rear of the unit. Using this set of switches, you can select the different operating modes and also set up the starting DMX channel in DMX mode. The chart below describes the various operating modes and their respective DIP switch settings:
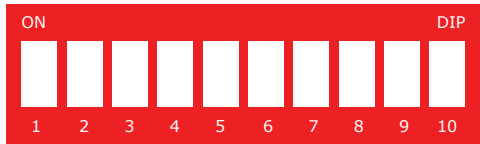
DIPSWITCH CHART										Function
#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	
ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	**ON**	**ON**	Auto Blizzard Logo
OFF	**ON**	OFF	OFF	OFF	OFF	OFF	OFF	**ON**	**ON**	Auto 3D Shapes
OFF	OFF	**ON**	OFF	OFF	OFF	OFF	OFF	**ON**	**ON**	Auto Galaxy 3D
OFF	OFF	OFF	**ON**	OFF	OFF	OFF	OFF	**ON**	**ON**	Auto Star Field
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	**ON**	**ON**	Auto 4-in-1 FX
ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	**ON**	Sound Active Blizzard Logo
OFF	**ON**	OFF	OFF	OFF	OFF	OFF	OFF	OFF	**ON**	Sound Active Shapes
OFF	OFF	**ON**	OFF	OFF	OFF	OFF	OFF	OFF	**ON**	Sound Active Galaxy
OFF	OFF	OFF	**ON**	OFF	OFF	OFF	OFF	OFF	**ON**	Sound Active Star Field
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	**ON**	Sound Active 4-in-1 FX
SET DMX ADDRESS									OFF	DMX Mode

Auto Mode
1.) Set the dipswitch numbers #9 and #10 to ON. Then switch ON either #1 (Auto Animation) , #2 (Auto 3D Shapes), #3 (Auto Galaxy 3D), #4 (Auto Star Field), or #1 thru #8 OFF (Auto 4-in-1 FX).

Sound Active Mode
1.) Adjust the sensitivity knob to the desired level.
2.) Set the dipswitch numbers #10 to ON. Then switch ON either #1 (Sound Active Animation) , #2 (Sound Active 3D Shapes), #3 (Sound Active Galaxy 3D), #4 (Sound Active Star Field), or #1 thru #9 OFF (Sound Active 4-in-1 FX).

Slave Mode
1.) Set dipswitch #1 to ON and others to OFF.

DMX Mode
1.) Set dipswitch 10 to OFF.
2.) Connect DMX OUT of controller to DMX IN of 1st fixture. Daisy chain DMX OUT to DMX IN for any additional fixtures.
3.) Use dipswitches 1 – 9 to set the fixtures *Starting DMX Address*. Each dipswitch represents a binary value in which the sum would equal the set address.

Example: To set the fixtures starting DMX address to 12, dipswitch #10 would be OFF (DMX Mode), plus dipswitch #3 and #4 would be ON. (4+8=12).

Dipswitch	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Value	1	2	4	8	16	32	64	128	256	ON

DMX Values In-Depth (15-Channel Mode)

Channel	Function		Value	Description
1	**Mode**		000 <-> 063 064 <-> 074 075 <-> 096 097 <-> 107 108 <-> 118 119 <-> 127 128 <-> 138 139 <-> 160 161 <-> 171 172 <-> 182 183 <-> 191 192 <-> 255	Laser Off Sound Active 3D Animations Sound Active Single 3D Shapes Sound Active Galaxy 3D Shape Effects Sound Active Star Field Effects Sound Active 4-in-1 Effects Automated 3D Animations Automated Single 3D Shapes Automated Galaxy 3D Shape Effects Automated Star Field Effects Automated 4-in-1 Effects DMX Manual Mode
2	**Pattern Mode**		000 <-> 127 128 <-> 191 192 <-> 255	Single 3D Shapes Galaxy 3D Shape Effects Star Field Effects
3	**Pattern 1 Selection**	Ch. 2 Set from 000-191	000 <-> 235 240 <-> 241 242 <-> 243 244 <-> 245 246 <-> 247 248 <-> 249 250 <-> 251 252 <-> 255	118 Static Patterns Cityscape Animation Cycle Halloween Theme Animation Cycle Dancer Animation Cycle Whale Jump Animation Cycle Horse Running Animation Cycle Bird Flying Animation Cycle Dinosaur Walk Animation Cycle
		Ch. 2 Set from 192-255	000 <-> 199 200 <-> 219 220 <-> 239 240 <-> 255	50 Static Patterns Running Animation Cycle Feline Animation Cycle Flying Bird Animation Cycle
4	**Pattern 1 Color**		000 <-> 001 002 <-> 069 070 <-> 079 080 <-> 089 090 <-> 099 100 <-> 109 110 <-> 119 120 <-> 129 130 <-> 139 140 <-> 179 180 <-> 219 220 <-> 255	Laser Off R--G--B--RG--RB--GB--RGB R--G--B (8 Points) RG--RB--GB--RGB (8 Points) R--G--B--RG--RB--GB--RGB (8 Points) R--G--B--RG--RB--GB--RGB (Flowing) R--G--B (Inflection Point) RG--RB--GB--RGB (Inflection Point) R--G--B--RG--RB--GB--RGB (Inflection Point) R--G--B (Auto) RG--RB--GB--RGB (Auto) R--G--B--RG--RB--GB--RGB (Auto)
5	**Pattern 2 Selection**	Ch. 2 Set from 000-191	000 <-> 239 240 <-> 255	118 Static Patterns No Function
		Ch. 2 Set from 192-255	000 <-> 199 200 <-> 255	50 Static Patterns No Function
6	**Pattern 2 Color**		000 <-> 001 002 <-> 069 070 <-> 079 080 <-> 089 090 <-> 099 100 <-> 109 110 <-> 119 120 <-> 129 130 <-> 139 140 <-> 179 180 <-> 219 220 <-> 255	Laser Off R--G--B--RG--RB--GB--RGB R--G--B (8 Points) RG--RB--GB--RGB (8 Points) R--G--B--RG--RB--GB--RGB (8 Points) R--G--B--RG--RB--GB--RGB (Flowing) R--G--B (Inflection Point) RG--RB--GB--RGB (Inflection Point) R--G--B--RG--RB--GB--RGB (Inflection Point) R--G--B (Auto) RG--RB--GB--RGB (Auto) R--G--B--RG--RB--GB--RGB (Auto)

Page 11

Channel	Function	Value	Description
7	Dual Pattern Mode	000 <-> 027 028 <-> 055 056 <-> 083 084 <-> 111 112 <-> 139 140 <-> 167 168 <-> 195 196 <-> 223 224 <-> 251 252 <-> 256	Single Pattern Mode (Channels 5 & 6 no Func) X Phase Y Phase X/Y Phase Together Zoom Phase Pattern 1 (No Sine), Pattern 2 (Sine Wave) Pattern 1 (No Zoom), Pattern 2 (Zoom) Pattern 1 (No Rotation), Pattern 2 (Rotation) Rotation Phase Pattern 1 (Adjustable X Position), Pattern 2 (Adjustable Y Position)
8	Moving-X	000 <-> 127 128 <-> 160 161 <-> 192 193 <-> 224 225 <-> 239 240 <-> 247 248 <-> 255	Manual Left/Right Movement Auto Left Movement Auto Right Movement Auto Left/Right Movement Jumping Rhombus Movement Upper Corner Movement
9	Moving-Y	000 <-> 127 128 <-> 160 161 <-> 192 193 <-> 224 225 <-> 231 232 <-> 239 240 <-> 247 248 <-> 255	Manual Up/Down Movement Auto Down Movement Auto Up Movement Auto Up/Down Movement Circular Movement Auto X Fluctuation Auto Square Fluctuation Lower Corner Movement
10	X-Axis Rotation	000 <-> 150 151 <-> 255	Manual Position Auto Position Spin
11	Y-Axis Rotation	000 <-> 150 151 <-> 255	Manual Position Auto Position Spin
12	Rotation	000 <-> 127 128 <-> 159 160 <-> 291 192 <-> 223 224 <-> 255	Manual Rotation Auto Clockwise Rotation Auto Counter Clockwise Rotation Auto Clockwise/Counter Clockwise Rotation Ellipse Tracking Rotation
13	Pattern Zoom (+/-)	000 001 <-> 159 160 <-> 191 192 <-> 223 224 <-> 255	No Function Manual Zoom (-/+) Auto Zoom (+) Auto Zoom (-) Auto Zoom (+/-)
14	Sine Wave Fluctuation	000 <-> 128 129 <-> 255	X Fluctuation Y Fluctuation
15	Drawing	000 <-> 064 065 <-> 255	Manual Draw Auto Draw (Slow <--> Fast)

Troubleshooting

Symptom	Solution
Fixture Auto-Shut Off	Check the fan in the fixture. If it is stopped or moving slower than normal, the unit may have shut itself off due to high heat. This is to protect the fixture from overheating. Clear the fan of obstructions, or return the unit for service.
Beam is Dim	Check optical system and clean excess dust/grime. Also ensure that the 220V/110V switch is in the correct position, if applicable.

Page 12

No Light Output	Check to ensure fixture is operating under correct mode, IE sound active/auto/ DMX/Etc., if applicable. Contact service for more information.
No Power	Check fuse, AC cord and circuit for malfunction.
Blown Fuse	Check AC cord and circuit for damage, verify that moving parts are not restricted and that unit's ventilation is not obstructed
No Response to Audio	Verify that the fixture is in "Sound Active" mode. Adjust Audio Sensitivity, If Applicable.
Fixture Not Responding / Responding Erratically	Make sure all connectors are seated properly and securely. Use Only DMX Cables. Install a Terminator. Check all cables for defects. Reset fixture(s).

**If your problem isn't listed, or if problems persist,
please contact support: support@blizzardlighting.com.**

5. APPENDIX

A Quick Lesson On DMX

DMX (aka DMX-512) was created in 1986 by the United States Institute for Theatre Technology (USITT) as a standardized method for connecting lighting consoles to lighting dimmer modules. It was revised in 1990 and again in 2000 to allow more flexibility. The Entertainment Services and Technology Association (ESTA) has since assumed control over the DMX512 standard. It has also been approved and recognized for ANSI standard classification.

DMX covers (and is an abbreviation for) Digital MultipleXed signals. It is the most common communications standard used by lighting and related stage equipment.

DMX provides up to 512 control "channels" per data link. Each of these channels was originally intended to control lamp dimmer levels. You can think of it as 512 faders on a lighting console, connected to 512 light bulbs. Each slider's position is sent over the data link as an 8-bit number having a value between 0 and 255. The value 0 corresponds to the light bulb being completely off while 255 corresponds to the light bulb being fully on.

DMX data is transmitted at 250,000 bits per second using the RS-485 transmission standard over two wires. As with microphone cables, a grounded cable shield is used to prevent interference with other signals.

There are five pins on a DMX connector: a wire for ground (cable shield), two wires for "Primary" communication which goes from a DMX source to a DMX receiver, and two wires for a "Secondary" communication which goes from a DMX receiver back to a DMX source. Generally, the "Secondary" channel is not used so data flows only from sources to receivers. Hence, most of us are most familiar with DMX-512 as being employer over typical 3-pin "mic cables," although this does not conform to the defined standard.

DMX is connected using a daisy-chain configuration where the source connects to the input of the first device, the output of the first device connects to the input of the next device, and so on. The standard allows for up to 32 devices on a single DMX link.

Each receiving device typically has a means for setting the "starting channel number" that it will respond to. For example, if two 6-channel fixtures are used, the first fixture might be set to start at channel 1 so it would respond to DMX channels 1 through 6, and the next fixture would be set to start at channel 7 so it would respond to channels 7 through 12.

The greatest strength of the DMX communications protocol is that it is very simple and robust. It involves transmitting a reset condition (indicating the start of a new "packet"), a start code, and up to 512 bytes of data. Data packets are transmitted continuously. As soon as one packet is finished, another can begin with no delay if desired (usually another follows within 1 ms). If nothing is changing (i.e. no lamp levels change) the same data will be sent out over and over again. This is a great feature of DMX -- if for some reason the data is not interpreted the first time around, it will be re-sent shortly.

In summary, since its design and evolution in the 1980's DMX has become the standard for lighting control. It is flexible, robust, and scalable, and its ability to control everything from dimmer packs to moving lights to foggers to lasers makes it an indispensable tool for any lighting designer or lighting performer.

Page 13

Keeping Your Mezmerizor™ As Good As New

The fixture you've received is a rugged, tough piece of pro lighting equipment, and as long as you take care of it, it will take care of you. That said, like anything, you'll need to take care of it if you want it to operate as designed. You should absolutely keep the fixture clean, especially if you are using it in an environment with a lot of dust, fog, haze, wild animals, wild teenagers or spilled drinks.

Cleaning the optics routinely with a suitable glass cleaner will greatly improve the quality of light output. Keeping the fans free of dust and debris will keep the fixture running cool and prevent damage from overheating.

In transit, keep the fixtures in cases. You wouldn't throw a prized guitar, drumset, or other piece of expensive gear into a gear trailer without a case, and similarly, you shouldn't even think about doing it with your shiny new light fixtures.

Common sense and taking care of your fixtures will be the single biggest thing you can do to keep them running at peak performance and let you worry about designing a great light show, putting on a great concert, or maximizing your client's satisfaction and "wow factor." That's what it's all about, after all!

Returns (Gasp!)

We've taken a lot of precautions to make sure you never even have to worry about sending a defective unit back, or sending a unit in for service. But, like any complex piece of equipment designed and built by humans, once in a while, something doesn't go as planned. If you find yourself with a fixture that isn't behaving like a good little fixture should, you'll need to obtain a Return Authorization (RA).

Don't worry, this is easy. Just send an email to support@blizzardlighting.com, and we'll issue you an RA. Then, you'll need to send the unit to us using a trackable, pre-paid freight method. We suggest using USPS Priority or UPS. Make sure you carefully pack the fixture for transit, and whenever possible, use the original box & packing for shipping.

When returning your fixture for service, be sure to include the following:

> 1.) Your contact information (Name, Address, Phone Number, Email address).
> 2.) The RA# issued to you
> 3.) A brief description of the problem/symptoms.

We will, at our discretion, repair or replace the fixture. Please remember that any shipping damage which occurs in transit to us is the customer's responsibility, so pack it well!

Shipping Issues

Damage incurred in shipping is the responsibility of the shipper, and must be reported to the carrier immediately upon receipt of the items. Claims must be made within seven (7) days of receipt.

Tech Specs!

Weight & Dimensions	
Length	14.6 inches (37 cm)
Width	12.6 inches (32 cm)
Height	5.2 inches (13 cm)
Weight	9.3 lbs (4.2 kg)

Power	
Operating Voltage	110-250VAC, 50-60 Hertz
Fuse	2A 250V
Power Consumption	50W

Light Source			
Laser	**Color**	**Wavelength**	**Power Output**
	Red	650nm	100mW
	Green	532nm	50mW
	Blue	470nm	100mW
	White (all)		250mW

Thermal	
Max. Operating Temp.	104 degrees F (40 degrees C) ambient

Control	
Protocol	USITT DMX-512
DMX Channels	15 Channel
Input	3-pin XLR Male
Output	3-pin XLR Female
Other Operating Modes	Standalone, Master/Slave, Sound Active

Other Information	
If you go flying back through time and you see somebody else flying forward into the future, it's probably best to avoid eye contact.	
Warranty	2-year limited warranty, does not cover malfunction caused by damage to LED's.

Enjoy your product!
Our sincerest thanks for your purchase!
--The team @ Blizzard Lighting